

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Adam J. Katz et al.

Serial No.:

10/797,371

Filed:

March 9, 2004

Docket:

30448.77USD1

Title:

ADIPOSE-DERIVED STEM CELLS AND LATTICES

#### CERTIFICATE UNDER 37 CFR §1.8:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 7, 2005.

55 S. Lake Avenue, Suite 710 Pasadena, California 91101 July 7, 2005

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

We are transmitting herewith the attached:

Transmittal sheet, in duplicate, containing Certificate under 37 CFR §1.8

☐ Information Disclosure Statement (37 C.F.R. §1.97 (b)(3))

Form 1449 (Information Disclosure Statement)

**Exhibit 152-165** 

Return postcard

Please charge any additional fees or credit overpayment to Deposit Account No. 50-0306. A duplicate of this sheet is enclosed.

MANDEL & ADRIANO

55 South Lake Avenue, Suite 710 Pasadena, California 91101 (626) 395-7801

Name: Sarah B. Adriano

Reg. No.: 34,470 Initials: SBA

# JUL 1 1 2005 EN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Adam J. Katz et al.

**Examiner:** 

Tara L. Garvey

Serial No.:

10/797,371

**Group Art Unit:** 

1636

Filed:

March 9, 2004

Docket No.:

30448.77USD1

Title:

ADIPOSE-DERIVED STEM CELLS AND LATTICES

#### **CERTIFICATE UNDER 37 CFR §1.8:**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 7, 2005.

By: Renato Marco P. Domingo

# SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (37 C.F.R. §1.97(b)(3))

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

This Information Disclosure Statement is being filed herein as a supplement to Applicant's June 15, 2004, October 25, 2004 and June 22, 2005 Information Disclosure Statements which were submitted under 37 C.F.R. §1.97(b)(3) before the mailing date of the first Office Action on the merits. In accordance with 37 C.F.R. §1.98(d), copies of Exhibits 152-165 as set forth in the Form 1449 are included herein.

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner. They are as follows:

Adam J. Katz et al. Serial No. 10/797,371 Filed: March 9, 2004

Page 2

- Yoo, Jung U. et al., "The Chondrogenic Potential of Human Bone-Marrow-Derived
   Mesenchymal Progenitor Cells," Journal of Bone and Joint Surgery, 1998, 80:1745-57 –
   Exhibit 152
- Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microvascular Endothelial Cells Stimulate Preadipocyte Differentiation In Vitro," Metabolism, 1994,
   43:906-12 Exhibit 153
- Mackay, Alastair M. et al., "Chondrogenic Differentiation of Cultured Human
   Mesenchymal Stem Cells from Marrow," Tissue Engineering, 1998, 4:415-28 Exhibit
   154
- Cryer, Anthony and Robin L. R. Van, "Characterization of the collagen types synthesized by human and rat adipocyte precursors in vitro," European Journal of Clinical Investigation, 1982, 12:235-8 Exhibit 155
- U.S. Patent No. 6,391,297 B1 issued May 21, 2002 Exhibit 156
- Gronthos, Stan et al., "Surface Protein Characterization of Human Adipose Tissue Derived Stromal Cells," Journal of Cellular Physiology, 2001, 189:54-63 Exhibit 157
- U.S. Patent No. 6,200,606 B1 issued March 13, 2001 Exhibit 158
- Caplan, Arnold I., "Mesenchymal Stem Cells," *Journal of Orthopaedic Research*, 1991, 9:641-50 Exhibit 159
- Ferrari, Guiliana et al., "Muscle Regeneration by Bone Marrow-Derived Myogenic Progenitors," Science, 1998, 279:1528-30 Exhibit 160
- Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human Mesenchymal Stem Cells In Vitro," *Journal of Cellular Biochemistry*, 1997, 64:295-312
   Exhibit 161
- Johnstone, Brian et al., "In Vitro Chondrogenesis of Bone Marrow-Derived Mesenchymal Progenitor Cells," Experimental Cell Research, 1998, 238:265-72 – Exhibit 162
- Pittenger, Mark F. et al., "Multilineage Potential of Adult Human Mesenchymal Stem Cells," Science, 1999, 284:143-7 Exhibit 163

Adam J. Katz et al.

Serial No. 10/797,371

Page 3

Filed: March 9, 2004

• Prockop, Darwin J., "Marrow Stromal Cells as Stem Cells for Nonhematopoietic Tissues," Science, 1997, 276:71-4 – Exhibit 164

Tontonoz, Peter et al., "mPPARγ2: tissue-specific regulator of an adipocyte enhancer,"

Genes & Development, 1994, 8:1224-34 - Exhibit 165

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102

and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish

that the reference(s) are not "prior art." Moreover, Applicants do not represent that the

references have been thoroughly reviewed or that any relevance of any portion of a reference is

intended.

Consideration of the items listed is respectfully requested. Pursuant to the provisions of

M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked

as being considered and initialed by the Examiner, to the undersigned with the next official

communication.

3

Adam J. Katz et al. Serial No. 10/797,371 Filed: March 9, 2004

Page 4

No fee is deemed necessary in connection with the filing of this Information Disclosure Statement. If any additional fee is required, authorization is hereby given to charge the amount of any such fee, or credit any overpayment, to Deposit Account No. 50-0306.

Respectfully submitted,

Sawh BM

Sarah B. Adriano

Registration No. 34,470

SaraLynn Mandel

Registration No. 31,853

Mandel & Adriano

55 South Lake Avenue, Suite 710

Pasadena, California 91101

(626)395-7801

Customer No. 26,941

(0,, 8)		
FORM 1449*	Docket Number	Application Number
( JUL 1 1 2005 😤)	30448.77USD1	10/797,371
INFORMATION DISCLOSURE STATEMENT	Applicant	
IN AN APPLICATION	Adam J. Katz et al.	
	Filing Date	Group Art Unit
(Use several sheets if necessary)	March 9, 2004	1636

		U.S. PATI	ENT DOCUMENTS			
EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,391,297 (Exhibit 156)	12/21/02	Halvorsen			12/01/98
	6,200,606 (Exhibit 158)	03/13/01	Peterson et al.			07/14/97

	FOREIGN PAT	ENT DOCUMENT	S	1		111 13 111
DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANS	LATION
					YES	NO

 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
Yoo, Jung U. et al., "The Chondrogenic Potential of Human Bone-Marrow-Derived Mesenchymal
Progenitor Cells," Journal of Bone and Joint Surgery, 19 98, 80:1745-57 (Exhibit 152)
Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelia Cells Stimulate Preadipocyte Differentiation In Vitro," <i>Metabolism</i> , 1994, 43:906-12 (Exhibit 153)
Mackay, Alastair M. et al., "Chondrogenic Differentiation of Cultured Human Mesenchymal Stem Cells from Marrow," <i>Tissue Engineering</i> , 1998, 4:415-28 (Exhibit 154)
Cryer, Anthony and Robin L. R. Van, "Characterization of the collagen types synthesized by human and rat adipocyte precursors in vitro," European Journal of Clinical Investigation, 1982, 12:235-8 (Exhibit 155)
Gronthos, Stan et al., "Surface Protein Characterization of Human Adipose Tissue-Derived Stroma Cells," Journal of Cellular Physiology, 2001, 189:54-63 (Exhibit 157)
Caplan, Arnold I., "Mesench ymal Stem Cells," Journal of Orthopaedic Research, 1991, 9:641-50 (Exhibit 159)
Ferrari, Guiliana et al., "Muscle Regeneration by Bone Marrow-Derived Myogenic Progenitors," Science, 1998, 279:1528-30 (Exhibit 160)
Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human Mesenchymal Stem Cells In Vitro," <i>Journal of Cellular Biochemistry</i> , 1997, 64:295-312 (Exhibit 161)
Johnstone, Brian et al., "In Vitro Chondrogenesis of Bone Marrow-Derived Mesenchymal Progenito Cells," Experimental Cell Research, 1998, 238:265-72 (Exhibit 162)
Pittenger, Mark F. et al., "Multilineage Potential of Adult Human Mesenchymal Stem Cells," Science, 1999, 284:143-7 (Exhibit 163)
Prockop, Darwin J., "Marro w Stromal Cells as Stem Cells for Nonhematopoietic Tissues," Science, 1997, 276:71-4 (Exhibit 164)
Tontonoz, Peter et al., "mPPARγ2: tissue-specific regulator of an adipocyte enhancer," Genes & Development, 1994, 8:1224-34 (Exhibit 165)
·

EXAMI	NER	
-------	-----	--

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.

<sup>\*</sup>Substitute Disclosure Statement Form (PTO-1449)

FORM 1449\*

### INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION

(Use several sheets if necessary)

	_
Docket Number 30448.77USD1	Application Number 10/797,371
Applicant	
Adam J. Katz et al.	
Filing Date	Group Art Unit
March 9, 2004	1636

:		U.S. PAT	ENT DOCUMENTS			
EXAMINER	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE 12/01/98
INITIAL	6,391,297 (Exhibit 156)	12/21/02	Halvorsen			07/14/97
	6,200,606 (Exhibit 158)	03/13/01	Peterson et al.			0,,,,,,,,

	FOREIGN PATEN	T DOCUMENT	S			
DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
***						·

Mg 5-1 4	
	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
	Yoo, Jung U. et al., "The Chondrogenic Potential of Human Bone-Marrow-Derived Mesenchymal Voice Surgery, 19 98, 80:1745-57 (Exhibit 152)
	Yoo, Jung U. et al., "The Chondrogenic Potential of Human Bond (Exhibit 152)
:	Yoo, Jung U. et al., "The Chondrogenic Potential of Hamas."  Progenitor Cells," Journal of Bone and Joint Surgery, 19 98, 80:1745-57 (Exhibit 152)  Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, "Extracellular Matrix Components Secreted by Microva scular Endothelial Varzaneh, "Extracellular Matrix Components Secreted
	Varzaneh, F. Eslami et al., "Extracellular Matrix Components 1994, 43:906-12 (Exhibit 153)
W.	Varzaneh, F. Eslami et al., "Extracellular Matrix Components Secretary 1994, 43:906-12 (Exhibit 153)  Cells Stimulate Preadipocyte Differentiation In Vitro," Metabolism, 1994, 43:906-12 (Exhibit 153)  Mackay, Alastair M. et al., "Chondrogenic Dif ferentiation of Cultured Human Mesenchymal Stem  Mackay, Alastair M. et al., "Chondrogenic 1998, 4:415-28 (Exhibit 154)
	Mackay, Alastair M. et al., "Chondrogenic Differentiation of Sephibit 154)
	Cells from Marrow," Issue Engineering, 1996, 1996, the collegen types synthesized by human
	Cryer, Anthony and Robin L. R. Van, "Characterization of the collegen types of and rat adipocyte precursors in vitro," European Journal of Clinical Investigation, 1982, 12:235-8
	and rat adipocyte precursors in vitro, European Souther of Simos and
	(Exhibit 155) Gronthos , Stan et al., "Surface Protein Characterization of Human Adipose Tissue-Derived Stromal
	Gronthos , Stan et al., "Surface Protein Characterization of Hambit 157)
1	Gronthos, Stan et al., Surface Fritzen Gronthos, Stan et
	Caplan, Arnold I., "Mesench ymai Stem Cells, Souther of Grandpasses
	(Exhibit 159) Ferrari, Guiliana et al., "Muscle Regeneration by Bone Marrow-Derived Myogenic P rogenitors,"
	Ferrari, Guiliana et al., "Muscle Regeneration by Bone Warrow Services and Control of the Services and Control of
	Science, 1998, 279:1528-30 (Exhibit 160)  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human   Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Differentiation of Purified, Culture-Expanded Human  Jaiswal, Neelam et al., "Osteogenic Different
	Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, Neelam et al., "Osteogenic Differentiation of Pulmed, Culture Jaiswal, "Osteogenic Differentiation of Pulmed, Culture Jaiswal, "Osteogenic Differentiation of Pulmed, "Osteogenic
	Mesenchymal Stem Cells in Vitro, Journal of Cellara Electronia y
	Johnstone, Brian et al., "In Vitro Chondrogenesis of Bone Marrow-Derived Mesenchymal Progenitor  1019 238:265-72 (Exhibit 162)
	Johnstone, Brian et al., "In Vitro Chondrogenesis of Bolic Historia 162)
	Johnstone, Brian et al., "M Villo State 1998, 238:265-72 (Exhibit 162)  Cells," Experimental Cell Research, 1998, 238:265-72 (Exhibit 162)  Pittenger, Mark F. et al., "Multilineage Potential of Adult Human Mesenchymal Stem Cells,"
	Pittenger, Mark F. et al., "Multilineage Potential of Addit Harman And Programme 1997 (F. 1998)
	Science, 1999, 284:143-7 (Exhibit 163)  Prockop, Darwin J., "Marro w Stromal Cells as Stem Cells for Nonhematopoietic Tissues," Science,
	Prockop, Darwin J., "Marro w Stromai Cells as Stelli Gold Co.
	1997, 276:71-4 (Exhibit 164) Tontonoz, Peter et al., "mPPARy2: tissue-specific regulator of an adipocyte enhancer," Genes &
	Tontonoz, Peter et al., "mPPARY2: tissue-specific regulator of the service of the
	Development, 1994, 8:1224-34 (Exhibit 165)
<del> </del>	

XAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

<sup>\*</sup>Substitute Disclosure Statement Form (PTO-1449)